Trakia Journal of Sciences, Vol. 6, No. 3, pp 26-30, 2008

Available online at:
http://www.uni-sz.bg
ISSN 1312-1723 (print)
ISSN 1313-3551 (online)

Original Contribution

THE INNOVATIONS AS A SUSTAINABLE REGIONAL DEVELOPMENT PRECONDITION

R. Grozeva*

Regional Development Department, Thracian University, Stara Zagora, Bulgaria

ABSTRACT

Innovations uncover new solutions to traditional problems. In its essence, an innovation represents a series of measures and actions structured to successfully trigger, assimilate and exploit novelty in the social and economic fields. The innovation can be technical, technological, as well as managerial. To implement, it requires both strategic and organizational skills. It can allow companies to successfully face competition, protect their market share and secure their future development; sometimes, it can insure the company's very survival. (1). For a sustainable development, the importance of innovation is best illustrated as a thinking process, a series of actions promoting environment - friendly economic growth. The objective of this report is to show the necessity for a purposeful and consistent policy requiring the existence of innovation as a prerequisite for the development of regional and national strategies. The tasks are as follows: to present the current experience in Bulgaria and the EU; to perform a comparative analysis between the EU and Bulgarian experience; to draw relevant conclusions and recommendations based on the analysis.

Key words: sustainable development, regional policy, key players, policy makers, decision makers, SMEs

CHARACTERISTICS OF INNOVATION AS AN ELEMENT OF SUSTAINABLE DEVELOPMENT

In years past, these two terms have become popular As a result, innovation strategies on the national and regional level, as well as innovation networks and working groups, have been formed. The Innovation Regions developed in Europe include 120 regions at this time. These formations have resulted in the creation of a number of medium - term programmes and measures created for the promotion and absorption of innovations.

It has become ever more popular to speak of sustainable development and regional development. EU policies have focused on promoting sustainable economic and social development programmes in developing countries, and in particular those EU countries most disadvantaged (2).

All of this focus is not by accident. In Europe and worldwide, politicians and business leaders have become aware that the resources at their disposal are not unlimited as to time and location. It has become clear to them that the traditional methods, technologies and approaches implemented by both management and manufacturing have not been able to achieve the necessary results. In spite of this awareness, however, the rates of creation and implementation of innovation promoting sustainable development remains at a level below what is needed.

While the understanding of the nature of innovation has grown considerably over the years, resulting in increasingly sophisticated regional innovation strategies, there is still a need for changed attitudes in order to meet future challenges.

The coordination of the INNOVATION COACH Project, which supported the implementation of regional innovation strategies in 2005 – 2007, calls for the technology and infrastructure at the centre of regional innovation policies to be replaced by the talent, entrepreneurial abilities, knowledge and priorities of the people.

Correspondence to: *Rumyana Grozeva, Stara Zagora Regional Economic Development Agency, 127 Stoletov str. , Stara Zagora 6000, Bulgaria*

The INNOVATION COACH Project has supported the implementation of the innovation strategies developed by 16 RIS – NAC (Regional Innovation Strategies in Newly Associated Countries). During the process of providing support, it has seen to it that technology remains the main focus of such projects. In Europe, the policy efforts still concentrate more on technology than on knowledge. Policy measures focus primarily on investments in "hard" infrastructure, such as technology centres, incubators and science parks, leaving limited resources for investing in people, facilitating access to innovation services and financing, and creating co-investment financial tools to leverage private resources.

CALL FOR CONTEMPORARY CONCEPT OF INNOVATION

The "brain drain" phenomenon, which represents a major threat for local economies and their capacity to compete, was not addressed by any of the priority measures prepared with their support. "Human talents" were not perceived to be an asset for the regions. As a consequence, these measures did not recognize a need to place knowledge, talents, or intellectual capital at key to innovation, choosing rather to focus more on valuing entrepreneurship and rewarding risk taking.

The RIS implementation is based on a demand for innovation and rarely considers the market as a driving force of innovation. According to the INNOVATION COACH Project Coordinator, awareness has to be raised among policy-makers on the importance of integrating innovation within a market-led framework and not only to consider it as a result of a well-supported research policy.

Since time is a precious and limited resource, it stresses that innovation policies should not only facilitate but also accelerate innovation processes. This finding is relevant for the role of the public sector and the added value of public-private partnerships. A partnership, where the public sector plays the role of regulator and facilitator while the private sector is in charge of managing interventions with a market-led and profit-driven approach, encourages effectiveness and sustainability of innovation policies.

THE INNOVATION'S SITUATION IN BULGARIA

The fourth innovation study in the Community, published in 2007, covers the period 2002 – 2004 and shows that Bulgaria ranks last in the EU-27 as regards the share of innovative companies in all businesses (having at least ten (10) employees) in the industry and service sectors", barely 16%.

Table 1 (3): The main areas of lagging of the National economy

INDICATOR	***EU -25***	***Bulgaria***
Low rate of GDP per capita	100%	32,1% (2771 ˆ)
Low percentage of innovations/ GDP per capita	1,86%	0,50%
Low labour output only 32.7% of the average value for EU-25 and the lowest rate compared to the newest member-countries and the other applicant countries	100%	32,7%
High energy demand by economy and insufficient use of renewable energy sources	0,21 tons petrol equivalent/ ˆ 1,000 of the GDP	1,76 tons petrol equivalent/ ˆ 1,000 of the GDP

The figures in the **Table** relate to the main areas Bulgaria has been lagging behind the EU-25.

By comparison with the fastest developing countries in Central and Eastern Europe – Hungary and the Czech Republic – the innovation rate of Bulgaria's large companies and SMEs is nearly two (2) times lower. Furthermore, when compared to the most innovative EU economies – Finland and Germany – the difference in innovation rates is nearly three (3) times lower.

There are numerous reasons for Bulgaria's poor performance. However, two primary causes can be identified:

- The low technological level of the Bulgarian economy
- The lack of a favourable climate encouraging innovation in companies

Bulgaria's EU membership presents an opportunity to address and dismantle these causes, only possible through unified efforts

and inspired partnerships at all managerial levels in both public and non-public sectors.

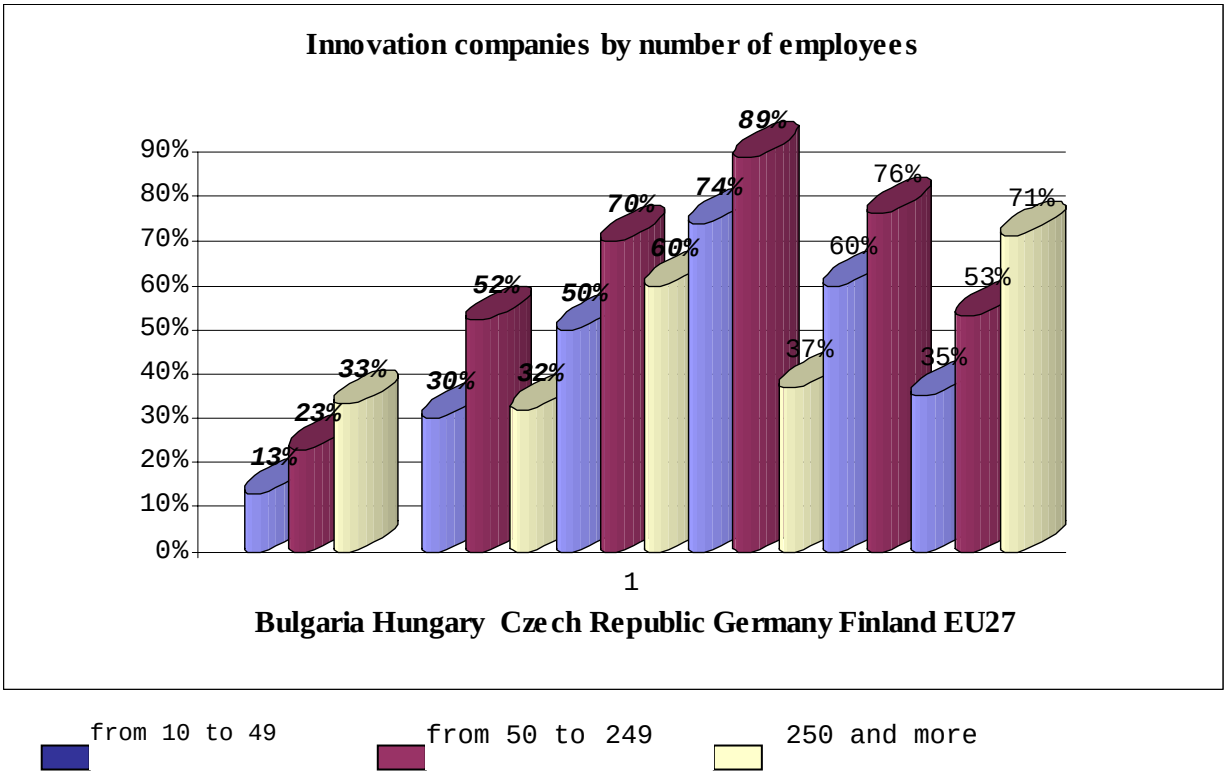
Bulgaria has been lagging behind most EU-27 countries as regards the share of innovative companies which cooperate with other organizations in the development of innovative products and processes – barely 22% in Bulgaria as opposed to 56.1% in Lithuania (Italy has the lowest share). (4)

The interrelation of science and business in introducing innovations is less pronounced in Bulgaria than it is in the EU – barely 6% of innovative companies are in partnership with universities or other institutions of higher learning providing tertiary education and only 3.9% are in partnership with national or public research institutes. Recent studies, however, show a positive change – the percentage of Bulgarian innovative companies which look upon universities and national or public research institutes as a very important source of information about innovation is relatively larger than the equivalent percentage in the EU-27.

The two examples detailed below exemplify that contrast:

- In Finland, companies in partnership with universities make up 33%, placing the country in a leading position within the EU. It should be noted that research and development in Finland is directed towards applied rather than fundamental investigation. Research and development is initiated, financed and fulfilled by the business sector.
- Though Germany has the largest share of innovative companies in the EU-27, it has an average share of partnerships with universities, national and public research institutes and other companies, just 9%. In this case, companies obtain the information they need from their own research centres. (5)

Table 2: Innovation companies by number of employees



Undoubtedly, other cases depicting various experience and results can be given as examples. Bulgaria and its region, however, must find their own winning formula rather than mechanically copy one or more practice or model. This, of course, does not exclude cooperation and experience exchanges, sharing lessons learned or discovered in other parts of Europe. The reason for this is clear – experience has proven that copying and adopting the best practices to be virtually impossible when the object is an intangible asset or assets or when the result is obtained through national research and development. In these cases, it is best if national and regional solutions ensue from the "internal" capacity of the innovation system.

THE INNOVATION PROCESS IN STARA ZAGORA

The Stara Zagora District has some experience to share in this respect since, while part of the South Central Regional for planning, the District took part in the development of the regional innovation strategy. The approach and methods applied were based primarily on the "internal" capacity and needs of the region. Its main strategic goals are identified below:

1. Using innovations to increase competitiveness of SMEs from the South Central Region
2. Furthering the culture of innovation in the South Central Region
3. Completion of the regional innovation system

Of a total of 3,529 companies who had submitted an annual balance sheet for 2006 to the Territory Bureau of Statistics of Stara Zagora, fifty-two (52) companies introduced technological innovations in the period 2004 – 2006. (Note – This information does not apply to the 242 companies having a main NACE 02, 03 and 05 / agriculture, silviculture and fishery.)

In 2007, a survey was conducted involving sixty (60) potentially innovative companies operating within the Stara Zagora District. The survey was carried out on a national scale and under the Multinational Programme PHARE 2005.

Nevertheless, much more needs to be done for the results to be tangible. Bulgaria's current position, last among the EU-27 with regard to the number of innovative companies and cooperation between them, is a natural consequence of the emphasis being placed on entrepreneurial ideas, insufficient and inadequate financial instruments in support of innovations, an insufficient number of highly skilled and qualified personnel, and the continuing brain drain.

A substantial part of the stated problems that Bulgarian companies face apply to the newly acceded EU member countries as well as to the EU-15.

By assessing the marked lagging of the EU behind the USA in the implementation of innovative achievements in order to improve economic growth, teams of experts, workshops, and a number of projects have directed their efforts toward finding feasible solutions to further European innovation.

The scientific and research units, businesses, local and regional authorities within the Stara Zagora Region must take full advantage of developing the competitiveness of the Bulgarian economy by focusing all their energies on the development of a knowledge and innovation based economy.

CONCLUSIONS:

Based on the regional innovation - related problems highlighted at the European and regional level, our recommendations are as follows:

1. **Balance the role of the public sector in implementing innovation strategy measures and promote "revenue-based" solutions for innovation support.** These solutions should leverage public funding for setting up self-sustaining mechanisms based on realistically calculated economic returns and benefits
2. **Work out tailor-made local solutions for policy implementation** which take into account* the specific regional context and needs to be addressed, rather than using already existing approaches and schemes "kept in the drawer".
3. **Make available integrated support actions for knowledge-based entrepreneurship** at both regional and national level. It is widely recognized in the regions covered by the Support Actions to RIS-NAC Processes that there is a need to launch Regional Entrepreneurship Strategies to create a favourable environment for knowledge exploitation and company creation as main drivers of economic growth and diversification
4. **Support interventions,** both "hard" infrastructure interventions (such as modernization of R&D infrastructures and equipment, and construction of incubation facilities and excellence centres) and "soft" investments (for instance, financing tools, intellectual property protection and promotion of entrepreneurial attitudes)
5. **Promote early-stage financing tools, including tax incentives, operating with a market and profit-driven approach,** which bring together would-be entrepreneurs, entrepreneurs and investors specializing in early stage business development, including Business Angels
6. **Shift the focus of interventions from high tech to high growth companies**

The European Union has already set a number of mechanisms to encourage innovative companies. Without question, they will have

an impact on both Bulgaria and its regions. As it has been noted, however, there is no universal innovation model – be it on a European or world level. In this respect, our country should deftly combine the experience of leading EU countries and, more specifically, the new member countries, from the point of view of having a similar starting point of membership and find its own path for creating a favourable innovation climate. For this purpose, however, having factual knowledge of the European innovation strategy and its direction and setting clear innovation priorities are not enough. There is something else equally important – a change in mentality, an understanding of innovations and their merit and adopting the proper attitude – on both a national and regional level. Stara Zagora has already made the first step. Let the steps to follow be more confident, consistent and determined.

REFERENCES

1. EURADA web glossary;
2. Art. 130u of Treaty Establishing the European Community;
3. The data has been sourced from the Ministry of Economy and Energy;
4. The Innovation BG;
5. The Bulgarian innovation policy within the EU - Innovations BG

BIBLIOGRAPHY

1. Observatory of European SMEs Summary - November 2006 – January 2007, requested by DG Enterprise and Industry - The Gallup Organization;
2. INNOCOACH – EURADA Project co-funded by DG Enterprise and Industry, 2006;
3. EUROPEAN INNOVATION SCOREBOARD 2007 - COMPARATIVE ANALYSIS OF INNOVATION PERFORMANCE, February 2008;
4. Innovating Regions in Europe (IRE) - Effective Regional Innovation Systems - Minutes from the 5th Meeting, 25 – 26 February 2008;
5. INNOVATION COACH coordinator, Mr Andrea Di Anselmo - IRE Newsletter January/February 2008;
6. Innovations.bg;
7. Operative Programme Competitiveness of Bulgarian Economy MEE;
8. Regional Innovation Strategy of South-Central Planning Region.